group (28.8% vs. 17.3%, p <0.0001). The prevalence of AO in subjects with HTN was lower in males than in females (35.8% vs. 42.8 %, p <0.0001). In contrast, AO was much more prevalent in NT males than in NT females (29.9% vs 4.0%, p <0.0001). HTN was more prevalent in subjects with AO compared to those without AO (13.1% vs 7.2 %, p <0.0001). This difference in HTN rate was much larger between males with and without AO (61.1% vs 9.4%, p <0.0001), while HT rates in females with AO or without AO were much smaller (3.1% vs. 1.5%, p <0.0001). The prevalence of obesity/overweight was 2.6/12.5% overall, 3.8/15.2% in males, 1.4/9.6% in females, 13/31% in subjects with HTN, 14/30% in males with HTN, and 5/38% in females with HTN. In all obese/overweight groups, HTN was more prevalent than in non-obese/overweight subjects (24.2% vs. 5.5% overall, 34.3% vs. 10.1% in males, 7.4% vs. 0.2% in females, all p <0.0001). Correlations between SBP/DBP and WC or BMI were significant and similar, both overall and in males and females (r = 0.24 to 0.39 for SBP and r = 0.16 to 0.25 for DBP, all p <0.0001).
*Conclusion:* 1.Using adult diagnostic criteria, HTN was found in 8.3% of 18-year-old students. 2.HTN in adolescents is clearly related to both BMI and abdominal obesity as measured by WC.

## Validation of the OMRON HEM-907 device for blood pressure measurement in hemodialysis patients with end-stage renal disease

ESC-ID **187**
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*Introduction:* The increasing availability of oscillometric blood pressure (BP) measuring devices has led to a significant increase in their use in clinical conditions. Prior to marketing, they should be validated according to the International Protocol for Validation of Blood Pressure Measuring Devices in Adults (IP), created by the European Society of Hypertension (ESH). Validation of new devices is carried out at rest only. IP protocol does not include specific groups of patients, when the accuracy of the oscillometric method could be limited. In hemodialysis patients with end – stage renal disease (HP) periodic changes in blood volume may disturb accuracy of oscillometric BP measuring devises.
*Aim:* The aim of the study was to validate the accuracy of the oscillometric device for BP measurement (OMRON HEM-907) in HP according to the IP.
*Materials and methods:* In a group of 33 HP (15 F and 18 M) aged 54 ± 15yrs 99 BP measurements were performed simultaneously by two trained observers using mercury sphygmomanometers alternately with the HEM-907 devise. The differences between the BP values were calculated for each measure.
*Results:* The mean BP of study group was 152 ± 32/82 ± 18 mmHg. HEM – 907 passed the first phase of the IP. For the second phase, readings for the device differed by less than 5 mmHg for 72 of the systolic BP (SBP) readings and 65 of the diastolic BP (DBP) readings; by less than 10 mmHg for 89 of SBP and 83 of DBP readings; and by less than 15 mmHg of 98 SBP and DBP readings. There were 24 patients with 2 of 3 differences for SBP readings but only 21 with differences for DBP readings less than 5 mmHg (recommended value - RV>22); and 2 patients with no differences for SBP readings less than 5 mmHg but 7 – for DBP readings ( RV<3).
*Conclusion:* The OMRON HEM – 907 did not pass the II phase of IP by ESH when validated in the group of HP. Even if an oscillometric device fulfills validation criteria of IP, it does not render its accuracy in all clinical situations.

## A comparison of clamydia pneumonia antibody serum levels in patients with acute myocardial infarction and control group

ESC-ID **960**
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*Introduction:* Atherosclerosis is the major underlining cause of coronary artery disease including acute myocardial infarction (AMI), and AMI is one of the most common causes of human mortality in the world today. Many factors may have roles in generation or accentuation of atherosclerosis and recently it has been found that among the numerous agents resulting to atherosclerosis, infective agents can have a special role. In this survey, we studied the anti-clamydia pneumonia antibody serum levels in 60 patients with AMI and compared it with control group.
*Materials and methods:* This study was done as case-control manner in a 6 month period in Ardabil Bouali Hospital and the serum level of anti-clamydia pneumonia antibody(IgG) was detected by immunoassay method in 60 patients with AMI admitted in CCU section. The same test was done in control group that were 60 cases and approximately similar in gender and age with AMI group. The cases of control group were selected from other sections of hospital with regard to not having known heart disease.
*Results:* In total, 60 patient with AMI and 60 cases as control group were studied in this survey that 80% of each group were male and 20% were female and the age range in each group was 35-80 years. 63% of AMI group had anterior, the rest had inferior AMI. IgG serum titer in all of the patients of case and control groups was positive and above 5 unit/ml.
*Conclusion:* As mentioned above, there was no significant statistical difference between anti-clamydia pneumonia IgG serum titer in case and control groups.

## Dynamics of left ventricular mass during long term use of bisoprolol and lerkanidipine in patients with essential hypertension

ESC-ID **194**
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*Introduction:* Arterial hypertension determines distinct adaptive left ventricular geometric responses. Left ventricular